

CHAPTER III

THE EFFECTS OF MARRIAGE ON HEALTHCARE ACCESS, USE, AND COSTS

The effects of marriage on health care access and use may also contribute to the overall effects of marriage on health. For example, just as spouses may influence health-related behaviors such as diet and alcohol use, they might also encourage the use of preventive health services such as cancer screenings or regular physical exams. Marriage might improve access to care by increasing the material resources available to purchase care or by providing access to a spouse's health insurance policy. To the extent that marriage affects patterns of health care access and use, it might also have consequences for an individual's health care costs.

In this chapter, we review evidence on the effects of marriage on three main health care outcomes: (1) health insurance status, (2) health care use, and (3) health care costs. We focus on these outcomes because they capture an individual's main interactions with the formal health care system at different points in adulthood and at varying levels of health and illness, from the point of acquiring health insurance and seeking preventive health services to the more intensive care and high health care costs associated with health decline and old age.

As in the previous chapter on health behaviors, we focus on evidence from longitudinal studies. The studies we review examine how transitions into and out of marriage lead to subsequent changes in patterns of health care access and use. Studies of marital transitions provide the most rigorous evidence on the links between marriage and health care outcomes because they help separate the effect of marriage from the effects of unchanging personal characteristics. Studies of marital transitions also help distinguish the causal effect of marriage from the effect of people selecting into marriage on the basis of health care behaviors or access to care.

HEALTH INSURANCE STATUS

Marriage may improve access to health care by increasing access to health insurance. For unmarried people without a regular source of insurance, marriage often affords the opportunity to become insured as a dependent on a spouse's health insurance policy. The

option of dependent coverage also provides some protection against becoming uninsured in the event of a job loss, a career change, or the decision to stop working to return to school or raise children. Even when both members of a couple have their own source of insurance, marriage improves access to care by providing some freedom to combine health plans or to choose the best option among several plans.

Much of the research on marriage and health insurance coverage consists of basic descriptive analyses comparing differences in insurance rates among married and unmarried people. These studies show that, among working-age adults, married men and women are more likely than those who are unmarried to have health insurance (Jovanovic et al. 2003; Meyer and Pavalko 1996). These studies also find that married adults are more likely to have employer-sponsored insurance than unmarried adults are and are less likely to have government-sponsored insurance through programs like Medicaid. However, such basic descriptive comparisons do not control for background differences between those who are married and those who are not and, therefore, do not adequately assess the effect of marriage on insurance coverage. Most research in this area focuses on patterns of insurance coverage among working-age adults, because marriage becomes a relatively less important determinant of insurance coverage after age 65, when both married and unmarried people become eligible for public health insurance through the Medicare program. Studies also tend to focus more on women's insurance coverage than on men's, because women depend relatively more on dependent spousal coverage as a source of health insurance, as we discuss below.

Some of the most compelling evidence on the links between marriage and health insurance coverage comes from a longitudinal study by Short (1998). This study uses survey data for a large national sample of men and women in the 1990-1992 panel of the Survey of Income and Program Participation (SIPP) to examine how transitions out of marriage affect the chances of becoming uninsured in the following eight months. Like most studies in this area, Short's study focuses on patterns of insurance coverage among working-age adults (ages 19 to 64), excluding any young adults who qualify as dependents on a parent's insurance policy. The study examines trends separately for men and women.

The study finds that, for both men and women, transitions out of marriage frequently lead to the loss of private health insurance. The chances of becoming uninsured in the eight months after the loss of a spouse are 23 percent for married women and 14 percent for married men. These figures include spousal losses due to widowhood, separation, or divorce. The study does not report the chances of becoming uninsured over a similar eight-month period for people who remained in stable marriages. However, focusing on changes in insurance coverage over a longer two-year period, the study finds that the chances of becoming uninsured are about 10 percent for married men and 8 percent for married women, suggesting that marital disruption increases the risk of insurance loss and that the effect appears particularly large for women. The larger effect of marital disruption for women suggests that wives depend relatively more on their husbands for health insurance than husbands depend on their wives. In gauging the relative importance of marriage in relation to other determinants of insurance coverage, the study finds that married women

have about the same chances of becoming uninsured after a marital dissolution as after a job change in the family.

However, the study also finds that the chances of becoming uninsured after a family member's job change also vary by marital status. For example, results show that married women have about a 16 percent chance of becoming uninsured after they or their husbands lose their jobs, but that single women have about a 34 percent chance of becoming uninsured after a job loss. Single women are at greater risk of becoming uninsured after a job loss in part because they cannot fall back on dependent coverage through a spouse's policy. The study did not examine whether marriage has a similar protective effect among men who lose their jobs.

HEALTH CARE USE

Other research shows that, in addition to improving access to health care (as measured by access to health insurance), marriage shapes patterns of health care use. Spouses can influence health care use by monitoring a partner's behaviors, helping a partner navigate the formal health care system to find appropriate and high-quality care, and providing basic social support services (such as transportation to doctors' appointments) and informal postoperative care after surgeries or other medical procedures. To the extent that married people view keeping in good health as part of their overall commitment to marriage, they might also have more motivation to seek necessary health care services.

The strongest evidence on marriage and health care use focuses on two main types of services: (1) preventive health services, and (2) hospital care. Research on the effects of marriage on preventive health services is fairly limited and focuses mostly on the connection between marriage and the use of cancer screenings. Research on hospital care focuses on a wider range of outcomes, including frequency of hospital stays, length of hospital stays, and quality of hospital care. Most of this research focuses on patterns of health care use among older adults, most likely because health care use increases as people age.

Preventive Health Services

There is no rigorous evidence in nationally representative data that links transitions in marital status to changes in the use of preventive health services. Instead, the best evidence in this area comes from the Harvard study of female health professionals described in Chapter II (Lee et al. 2005). In addition to providing evidence on the health behaviors discussed in the previous chapter, the study provides evidence on the links between marriage and women's use of breast cancer screenings.

The study uses longitudinal data for a large nationwide sample of nurses to relate changes in marital status over a four-year period to women's decisions to skip regular mammograms. The women ranged in age from 46 to 71 at the beginning of the study period. To account for possible differences among women in their willingness to seek care or other factors predictive of health care use, the study focuses only on women who reported having received a mammogram in the two years preceding the study period. The study's statistical

models also control for age, employment status, and preexisting chronic health conditions and health risk behaviors.

The study finds that transitions out of marriage due to either widowhood or divorce increase women's odds of skipping regular breast cancer screenings. Widowhood increases the odds by roughly 24 percent, divorce by roughly 27 percent. For women previously widowed or divorced, the study finds no evidence that remarriage reduces the odds of skipping regular breast cancer screenings relative to remaining unmarried. The finding of an effect on the likelihood of cancer screening for marital dissolution but not for marital reentry suggests that these patterns may not reflect only the increased likelihood of cancer screenings for those who are married. Instead, the trauma associated with the loss of a spouse may play an important role in the likelihood of skipping these screenings.

Limited evidence from other studies in this area suggests that similar results hold for other types of cancer screenings, for broader and more representative samples of the U.S. population, and for both men's and women's health care use (see, for example, Goodwin et al. 1987; Osborne et al. 2005). However, this evidence consists largely of basic descriptive comparisons that do not adequately account for the effects on health care use of other personal characteristics. Thus, an important area for future research is to extend the analysis of marriage and preventive health services to broader samples of the population and a wider range of health services.

Hospital Care

Other studies show that marriage also affects the use of more intensive health services like hospital care. Some of the most compelling evidence on marriage and hospital care comes from a recent study by Iwashyna and Christakis (2003), which uses administrative records for more than 600,000 newly diagnosed, seriously ill Medicare beneficiaries to examine the effects of marriage on hospital choice, length of hospital stay, and quality of hospital care as measured by early readmission. Members of the study sample are all over age 65, with an average age of just over 79.

Unlike the other studies we review in this section, the Iwashyna and Christakis study uses cross-sectional, rather than longitudinal, data. Even so, we feature this study because it uses other rigorous statistical methods to help separate the effect of marriage on hospital care from the effects of other related personal characteristics. For example, to account for the possibility that married people are more likely to live in areas with higher quality hospitals or that the effect of marriage on hospital care varies depending on the number and type of hospitals available in a local area, the study uses multilevel regression models that adjust for a patient's local county of residence.¹ The study uses a similar method to assess the effect of marriage on length of hospital stay and quality of hospital care controlling for

¹ In effect, these models estimate the relationship between marriage and hospital care separately for each local county represented in the data, and then average these county-specific relationships to yield the overall relationship for the entire study sample.

hospital choice. Differences in health insurance are not a major concern in this study, because the patients in the study sample all received the same source of public insurance through the Medicare program. The study adjusts for differences in health between married and unmarried people by comparing patterns of hospital use only among people with similar health problems. The study also adjusts for basic demographic characteristics such as age and race; however, it cannot adjust for individual income, education, or other socioeconomic characteristics, because this information is not included in the Medicare data. The study also examines possible gender differences in the effect of marriage on hospital care.

The study finds that, compared with widows, married people receive care in higher-quality hospitals. This relationship holds for several measures of hospital quality, including the hospital's placement on national rankings of hospital performance, the presence of a residency program in the hospital, and the hospital's score on a broad index of medical technology. The study also finds that married people have shorter average hospital stays but do not receive significantly higher-quality hospital care (as measured by early readmission), controlling for hospital choice.

The findings for hospital choice may reflect the help married men and women receive from their spouses in navigating the formal health care system and choosing a high-quality health care provider. Married people may also have more economic resources to afford care in high-quality hospitals. The effect of marriage on length of hospital stay likely reflects the ability of spouses to reduce the need for long hospital stays by providing informal care at home. However, even with shorter average hospital stays, married people receive hospital care that is similar in quality to the care received by those with longer hospital stays and are not at higher risk for early readmission.

The study finds no major gender differences in the effect of marriage on either hospital choice or quality of hospital care (controlling for hospital choice). However, there are significant gender differences in the effect of marriage on length of hospital stay, such that the relationship is strongest for men. For men, the effect of marriage on length of hospital stay is similar in size to the effect of being seven years younger. In other words, married men have the same average length of hospital stay as widowed men who are seven years younger. For women, the effect of marriage on length of hospital stay is similar to the effect of being three years younger. The fact that the effect is stronger for men suggests that wives are more likely than husbands to provide the types of informal home care necessary to shorten the length of hospital stays.

However, little evidence exists that marriage affects the frequency of hospital stays. For example, Wolinsky and Johnson (1992) use data from the 1984 and 1986 waves of the national Longitudinal Study of Aging (LSOA) to examine the effect of widowhood on a range of measures of health services use, including hospital stays. The study sample consists of more than 4,000 men and women ages 70 and older. The study compares the frequency of hospital stays among married and recently widowed adults at the end of the two-year study period, adjusting for differences in hospital use at the beginning of the period. The study also adjusts for differences in health status, insurance coverage, and basic social and demographic factors like gender, race, and education level.

The study finds no significant effect of widowhood on the frequency of hospital stays. Rather, it finds that older adults are equally likely to need occasional hospital care, regardless of marital status. These findings do not run counter to the evidence presented in the Iwashyna and Christakis study. Rather, they help specify how spouses influence the use of hospital care. In particular, the results of these studies suggest that spouses affect hospital care less by reducing the occasional need for such care than by influencing the type and length of care received when the need arises. Other national studies similarly show little relation between marriage and frequency of hospital stays (see, for example, Prigerson et al. 2000, described below).

HEALTH CARE COSTS

Given evidence that marriage affects health care access and use, it follows that marriage may also affect a person's total health care costs. There is currently little direct research evidence showing a causal effect of marriage on health care costs among the U.S. population. However, it is possible to draw some conclusions about the links between marriage and health care costs through indirect evidence from studies of the effect of marriage on the use nursing home care and other high-cost health services.

Some of the best evidence on the effects of marriage on health care costs comes from a study by Prigerson et al. (2000). This study uses nationally representative data from the longitudinal Americans' Changing Lives study to examine the effect of marriage and widowhood on health care costs over a three-year period from 1986 to 1989. The study examines how changes in health care costs over the three-year study period relate to transitions out of marriage. The study focuses on adults at least 50 years old and combines data for men and women to increase the sample size. The study finds that, relative to men and women who became widowed during the study period, those who remained married had significantly lower annual health care costs in the last year of the study, controlling for the level of annual costs observed at the beginning of the study. The study estimates the total gap in annual health care costs in the last year of the study as roughly \$443 in 1989 dollars.

Study participants were not asked directly about the amount they spent on health care costs. Rather, researchers inferred costs by estimating the average cost of four common types of health services that study participants used and reported: (1) physician visits, (2) psychiatrist visits, (3) nursing home stays, and (4) hospital stays. The study finds that married men and women reported significantly fewer physician visits than did widowers and had lower rates of nursing home stays, and that these differences in turn largely explain the gap in total health care costs. The study finds no significant differences between those who are widowed and those who are married in the frequency of psychiatrist visits or hospital stays; however, the study does not examine the effect of marital status on the length of hospital stay, as the Iwashyna and Christakis (2003) study described earlier does. Marriage might also lower health care costs by shortening the average length of hospital stays—thus creating another potential source of cost savings not captured by the Prigerson et al. study.

Other studies provide indirect evidence on the effect of marriage on health care costs by showing that married people often replace expensive end-of-life care with more informal care at home. For example, Freedman (1996) finds that marriage reduces the risk of nursing home admission among older men and women by roughly 50 percent. This study tracks the nursing home use of a sample of 2,606 older men and women in New Haven, Connecticut, from 1982 to 1989. The statistical analyses use event history regression models that estimate the effect of marriage on the risk of nursing home admission after adjusting for differences in gender, ethnicity, income, and the presence of adult siblings or children in the household. Additional analyses test for gender differences in the effect of marriage on nursing home use.

Results of the study show that, for both men and women, the risk of nursing home admission increases with age, but it is significantly lower at all ages among married men and women than among singles. The effect of marriage on nursing home use is slightly greater for men than women. Although these specific results apply only to a particular local sample of older men and women, other studies show similar effects of marriage on nursing home use in nationally representative data (see, for example, Wolinsky and Johnson 1992, described earlier in this chapter). Given the high costs of nursing home care, it follows that marriage should also reduce health care costs for end-of-life care. However, there is no currently rigorous evidence available testing this hypothesis with nationally representative data.

SUMMARY OF RESULTS

The evidence to date suggests that marriage does indeed affect patterns of health care access and use. In particular, research shows that married people have better access to private health insurance, have shorter average hospital stays, receive care in higher-quality hospitals, are less likely to receive end-of-life care in nursing homes or other institutional settings, and may incur lower health care costs. Limited evidence from non-representative samples of health care professionals also suggests that married people may be more likely to use preventive health services like cancer screenings.

Studies find similar effects of marriage on health care outcomes for both men and women. However, the strength of these effects varies by gender. For outcomes related to the provision of informal care and basic social support services—namely, length of hospital stay and risk of nursing home admission—the effect of marriage is stronger for men than for women. However, for outcomes related to health insurance coverage, the effect of marriage is stronger for women.